IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Koichi SHUDO et al.

Group Art Unit : 1627

Appl. No. : 10/598,709

Examiner : Umamaheswari Ramachandran

I.A. Filed : March 9, 2005

Confirmation No. : 9187

For : MEMORY FIXATION ACCELERATOR

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Commissioner for Patents
U.S. Patent and Trademark Office
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Randolph Building
401 Dulany Street
Alexandria, VA 22314

Sir :

This appeal is under 35 U.S.C. 134 from the decision of the Examiner finally rejecting claims 2, 7-9, 16, 18 and 19 as forth in the Final Office Action dated April 28, 2011, the Advisory Action dated July 20, 2011, and the Examiner Interview Summary form dated August 31, 2011 making of record a telephone interviews of August 17 and 22, 2011.

A Notice of Appeal to the April 28, 2011 Final Office Action was filed on August 26, 2011 so that the time for filing an Appeal Brief extends until October 26, 2011.

Appellant notes that this Appeal Brief is being filed by October 26, 2011 so that an extension of time and the fee associated therewith should not be necessary for maintaining the pendency of the application. However, if for any reason any extension of time and/or any fee is necessary to maintain the pendency of the application, including any extension of time and/or any appeal fee, this is an express request for any required extension of time and authorization to charge any necessary fee to Deposit Account No. 19-0089.

The requisite fee under 37 C.F.R. 41.20(b)(2) in the amount of 620.00 for the filing of the Appeal Brief is being paid herewith.

As noted above, if for any reason any extension of time and/or any fee is required to maintain the pendency of the application, including any extension of time and/or appeal fee, authorization is hereby provided to charge any required fee, including any fee for the Appeal Brief and any necessary extension of time fee to Deposit Account No. 19-0089.

(I) REAL PARTY IN INTEREST

The real party in interest is RESEARCH FOUNDATION ITSUU LABORATORY and KEMPHYS LTD.

(II) RELATED APPEALS AND INTERFERENCES

None

There are no pending related appeals and/or interferences.

(III) STATUS OF CLAIMS

The status of the claims is as follows:

Claims 2, 6-9 and 16-19 are pending in this application.

Claims 1, 3-5 and 10-15 are canceled.

Claims 6 and 17 are withdrawn from consideration as being directed to a non-elected invention.

Claims 2, 7-9, 16, 18 and 19 are under appeal.

Of the pending claims, claims 2, 7-9, 16, 18 and 19 have been finally rejected in the Final Office Action dated April 28, 2011, and are under appeal.

The finally rejected claims are included in the listing of Claims Under Appeal.

(IV) STATUS OF AMENDMENTS

The appeal is based upon finally rejected claims.

A response after the mailing of the Final Office Action was filed June 28, 2011, and did not include any amendment therein.

(V) SUMMARY OF THE CLAIMED SUBJECT MATTER

The following description is made with respect to the independent claim and includes references to particular parts of the specification. As such, the following is merely exemplary and is not a surrender of other aspects of the present invention that are also enabled by the present specification and that are directed to equivalent methods within the scope of the claims.

Independent Claim 7

Independent claim 7 recites a method for promoting formation of long-term memory from short-term memory (e.g., page 2, lines 12-15; page 9, lines 7-27), comprising administering to a mammal, in need of consolidation of short-term as long-term memory (e.g., page 3, lines 28-32), a therapeutically effective amount of a composition to promote memory consolidation of short-term memory as long-term memory (e.g., page 9, lines 7-27), the composition comprising 4-[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)carbamoyl]benzoic acid as an active ingredient (e.g. page 3, lines 13-21, and the Examples from page 10, line 28 to page 14, line 4).

(VI) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 2, 7-9, 16, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,965,606 to Teng et al. (hereinafter "Teng") and Goodman (PNAS, 2003, 100, 5, 2901-05) and Etchamendy (J Neuosci, 2001, Aug 21(16) p 6423-29).

(VII) ARGUMENT

(I) Traversal of rejection of claims 2, 7-9, 16, 18 and 19 under 35 U.S.C. 103(a) as being unpatentable over Teng and Goodman and Etchamendy.

(a) Claims 2, 7-9, 16, 18 and 19 are not properly rejected under 35 U.S.C. 103(a) as being unpatentable over Teng and Goodman and Etchamendy.

(A) ***Arguments for Independent Claim 7 and Dependent Claims 2, 8, 9, 16, 18 and 19***

The rejection of independent claim 7 and dependent claim 18 under 35 U.S.C. 103(a) as being unpatentable over Teng and Goodman and Etchamendy is in error, the decision of the Examiner to reject these claims should be reversed, and the application should be remanded to the Examiner.

Appellant's independent claim 7 is directed to a method for promoting formation of long-term memory from short-term memory, comprising administering to a mammal, in need of consolidation of short-term as long-term memory, a therapeutically effective amount of a composition to promote memory consolidation of short-term memory as long-term memory, the composition comprising 4-[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)-carbamoyl]benzoic acid (hereinafter also referred to as "Am80") as an active ingredient.

Appellant submits that one having ordinary skill in the art would not have combined the disclosures and Teng, Goodman and Etchamendy in the manner asserted in the rejection. Moreover, even if for the sake of argument the disclosures were combined, Applicants' claimed subject matter would not be at hand, especially when none of the documents used in the rejection of record teaches or suggests Applicants' recited method for promoting formation of long-term memory from short-term memory, comprising administering to a mammal, in need of consolidation of short-term as long-term memory, a therapeutically effective amount of a

composition to promote memory consolidation of short-term memory as long-term memory, the composition comprising Am80 as an active ingredient. In fact, the prior art used in the rejection cannot arrive at Appellant's claimed subject matter, **because not only does the prior art used in the rejection not teach or suggest a method for promoting formation of long-term memory from short-term memory, the prior art used in the rejection does not even disclose Am80. Therefore, as will be expanded upon below, the rejection does not arrive at Appellants' recited population of a mammal in need of consolidation of short-term as long-term memory let alone disclose the compound Am80 recited in Appellant's claims.**

Teng broadly discloses in the Background Art section of his patent many uses for retinoid-like compounds, but does not provide any guidance, including any reason, for arriving at Appellant's claimed subject matter. In this regard, it is noted that Teng merely discloses in the Background Art section of the patent a long list of uses of retinoid-like compounds that extends almost the entire length of column 1 of Teng. **Teng therefore has a shotgun disclosure with respect to background information.** The shotgun disclosure in the Background Art section of Teng does not provide any direction with respect to Teng's Summary of the Invention, beginning at column 3 of Teng, which is directed to treatment of tumors without having one or more undesirable side effects of retinoids, such as inducement of weight loss, mucocutaneous toxicity, skin irritation and teratogenecity. Thus, one having ordinary skill in the art reading the disclosure of Teng would be directed to methods of treatment of tumors and would, at most, experiment with compounds disclosed in Teng that treat tumors without having one or more undesirable side effects of retinoids.

To show the lengthy disclosure of background information in Teng, it is noted that Teng has the following disclosure therein **(relating to background information)** with only mere

mention of "neurodegenerative diseases such as Alzheimer's disease, Parkinson's disease and stroke" (as bolded), as follows:

> Compounds which have retinoid-like activity are well known in the art, and are described in numerous United States and other patents and in scientific publications. It is generally known and accepted in the art that retinoid-like activity is useful for treating animals of the mammalian species, including humans, for curing or alleviating the symptoms and conditions of numerous diseases and conditions. In other words, it is generally accepted in the art that pharmaceutical compositions having a retinoid-like compound or compounds as the active ingredient are useful as regulators of cell proliferation and differentiation, and particularly as agents for treating skin-related diseases, including, actinic keratoses, arsenic keratoses, inflammatory and non-inflammatory acne, psoriasis, ichthyoses and other keratinization and hyperproliferative disorders of the skin, eczema, atopic dermatitis, Darriers disease, lichen planus, prevention and reversal of glucocorticoid damage (steroid atrophy), as a topical anti-microbial, as skin anti-pigmentation agents and to treat and reverse the effects of age and photo damage to the skin. Retinoid compounds are also useful for the prevention and treatment of cancerous and precancerous conditions, including, premalignant and malignant hyperproliferative diseases such as cancers of the breast, skin, prostate, cervix, uterus, colon, bladder, esophagus, stomach, lung, larynx, oral cavity, blood and lymphatic system, metaplasias, dysplasias, neoplasias, leukoplakias and papillomas of the mucous membranes and in the treatment of Kaposi's sarcoma. In addition, retinoid compounds can be used as agents to treat diseases of the eye, including, without limitation, proliferative vitreoretinopathy (PVR), retinal detachment, dry eye and other corneopathies, as well as in the treatment and prevention of various cardiovascular diseases, including, without limitation, diseases associated with lipid metabolism such as dyslipidemias, prevention of post-angioplasty restenosis and as an agent to increase the level of circulating tissue plasminogen activator (TPA). Other uses for retinoid compounds include the prevention and treatment of conditions and diseases associated with human papilloma virus (HPV), including warts and genital warts, various inflammatory diseases such as pulmonary fibrosis, ileitis, colitis and Krohn's disease, **neurodegenerative diseases such as Alzheimer's disease, Parkinson's disease and stroke**, improper pituitary function, including insufficient production of growth hormone, modulation of apoptosis, including both the induction of apoptosis and inhibition of T-cell activated apoptosis, restoration of hair growth, including combination therapies with the present compounds and other agents such as Minoxidil^{R}, diseases associated with the immune system, including use of the present compounds as immunosuppressants and immunostimulants, modulation of organ transplant rejection and facilitation of wound healing, including modulation of chelosis.

In contrast to the long background information list discussing background information, Teng discloses in the Summary of the Invention section the treatment of tumors without having one or more undesirable side effects of retinoids, as follows:

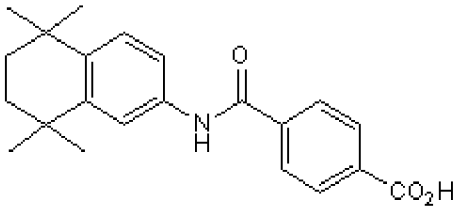
> It has been discovered in accordance with the present invention that retinoid-like compounds which act selectively, or preferably even specifically on RAR_α receptor subtypes in preference over RAR_β and RAR_γ receptor subtypes, possess desirable pharmaceutical properties associated with retinoids, and are particularly suitable for treatment of tumors, such as acute monocytic leukemia, cervical carcinoma, myeloma, ovarian carcinomas and head and neck carcinomas, without having one or more undesirable side effects of retinoids, such as inducement of weight loss, mucocutaneous toxicity, skin irritation and teratogenecity.

Accordingly, Teng is directed to treatment of tumors without having one or more undesirable side effects of retinoids, such as inducement of weight loss, mucocutaneous toxicity, skin irritation and teratogenecity. Teng directs his disclosure of retinoids with the aim of avoiding one or more undesirable side effects of retinoids. In fact, the first full paragraph at column 10 of Teng indicates that topical application is preferred.

Teng does not provide any teaching or suggestion for arriving at a method for promoting formation of long-term memory from short-term memory, comprising administering to a mammal, in need of consolidation of short-term as long-term memory, a therapeutically effective amount of a composition to promote memory consolidation of short-term memory as long-term memory, the composition comprising Am80 as an active ingredient.

Still further, with regard to Appellant's recited Am80, Teng broadly discloses a generic formula that may encompass Am80; however, Teng does not provide explicit disclosure of Am80. Moreover, Teng does not provide any direction to arrive at Am80. Accordingly, for this additional reason, Teng does not provide any teaching or suggestion for arriving at Appellant's claimed subject matter.

Am80 has the structural formula of:



In contrast, Teng discloses beginning at column 7, line 41 (with bold emphasis added) preferred substituents that would not lead to Applicants' recited Am80:

> Referring now to the W1 and W2 groups in Formula 1, these groups are, generally speaking, electron withdrawing groups, which are present in the compounds of the invention either in the aromatic portion of the condensed ring system, or as a substituent of the aryl or heteroaryl group Y. Preferably a **W2 group is present in the Y group**, and a **W1 group is also present in the aromatic portion of the condensed ring system**. When the Z group is S (thioamides) a W1 or W2 group does not necessarily have to be present in the compounds of the invention in accordance with Formula 1, although preferably at least one of the W1 or W2 groups is nevertheless present. **In the aryl or heteroaryl Y moiety in the compounds of Formula 1 and Formula 2 as well, the W2 group is preferably located in the position adjacent to the B group**; preferably the B group is in para position in the phenyl ring relative to the "amide" moiety, and **therefore the W2 group is preferably in meta position relative to the amide moiety**. Where there is a W1 group present in the aromatic portion of the condensed ring system of the compounds of Formula 1, it preferably occupies the 8 position of the chroman nucleus with the Z=C--NH-- group occupying the 6 position. In tetrahydronaphthalene compounds of Formula 1, the Z=C--NH-- group is preferably in the 2-position, and the W1 group is preferably in the 4 position. However, when the W1 group is OH in compounds of Formula 1, then the OH is preferably in the 3 position of the tetrahydronaphthalene ring.
>
> Preferred W1 and W2 groups are F, NO_2, Br, I, CF_3, ClN_3, and OH. **The presence of one or two fluoro substituents in the Y group (W2) is especially preferred. When the Y group is phenyl, the fluoro substituents preferably are in the ortho and ortho' positions relative to the B group, which is preferably COOH or COOR8.**

Still further, Teng discloses the compounds that are most preferred in his method of treating tumors in Tables 1 and 2, and exemplified compounds in his examples that would not lead one having ordinary skill in the art to arrive at Am80, especially in view of the preferred

substituents of Teng. For example, there must be some teaching or suggestion in the prior art that would lead one having ordinary skill in the art to arrive at the recited subject matter.

With regard to the above, attention is directed to *Takeda Chem. Indus. v. Alphapharm Pty., Ltd.*, 492 F.3d 1350, 1356 (Fed. Cir. 2007) which teaches that in order to establish a *prima facie* case for obviousness with regard to a novel compound, the motivation of one having ordinary skill in the art to conduct a chemical modification of a known compound in a particular manner is important. In Takeda, the Court noted that in "cases involving new chemical compounds, it remains necessary to identify some reason that would have led a chemist to modify a known compound in a particular manner to establish prima facie obviousness of a new claimed compound "(emphasis added). Id. at 1357. Under the present circumstances, while Am80 is a known compound *per se*, Teng does not teach or suggest Am80 let alone Appellant's recited method which includes administering Am80. There must be some teaching or suggestion in the prior art that would arrive at Appellant's recited method including each and every feature recited in Appellant's claims, including the administration of Am80.

The rejection attempts to overcome the deficiencies of Teng by relying upon disclosures from Etchamendy and Goodman. However, one having ordinary skill in the art would not have combined the disclosures of these documents with Teng, especially in view of the diverse disclosures of Teng, Goodman and Etchamendy. Moreover, even if for the sake of argument the disclosures were combined, any proper combination of the disclosures would not arrive at Appellant's claimed subject matter.

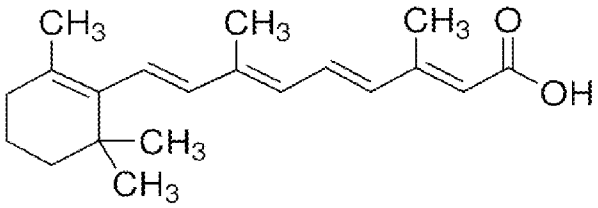
Etchamendy is directed to the alleviation of a selective age-related relational memory deficit in mice by pharmacologically induced normalization of brain retinoid signaling. In contrast, Teng is directed to treatment or prevention of malignant tumors or leukemic disease or

condition. Accordingly, one having ordinary skill would not have combined the disclosure of Etchamendy with Teng. There is no indication in the rejection of record why one having ordinary skill in the art, without the improper benefit of Appellant's disclosure, would look to the disclosure of Etchamendy pertaining to the alleviation of a selective age-related relational memory deficit in mice by pharmacologically induced normalization of brain retinoid signaling to modify Teng's treatment or prevention of malignant tumors or leukemic disease or condition. A mere reference to various types of compounds having retinoid-like activity in the Background Art section of Teng does not provide any adequate basis for modifying a method as disclosed by Teng for treatment or prevention of malignant tumors or leukemic disease or condition with Etchamendy 's alleviation of a selective age-related relational memory deficit in mice by pharmacologically induced normalization of brain retinoid signaling. Accordingly, the combination of Etchamendy and Teng is without appropriate basis at least for this reason.

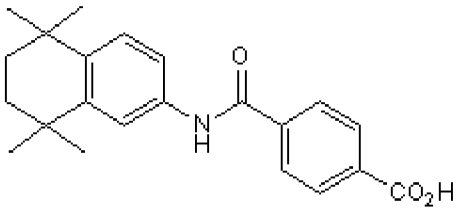
Moreover, there is no reason to pick and choose from the vast disclosure in the Background Art section of Teng one of the many listed uses of retinoid-like compounds from the long laundry list thereof without there being some reason to select the one of many. However, Teng does not provide any reason to select based upon a mere mention of "neurodegenerative diseases such as Alzheimer's disease, Parkinson's disease and stroke" in a long list. In fact, ass noted above, Teng is directed to the treatment of tumors without having one or more undesirable side effects of retinoids. Moreover, there is no reason even following such mere disclosure in Teng to arrive at Appellant's method for promoting formation of long-term memory from short-term memory let alone such a method using Am80.

Still further, Etchamendy is discussed and contrasted at page 2, lines 12-15 in Appellant's originally filed application. As noted in Appellant's specification, Etchamendy may suggest

suppression of reduction of already consolidated long-term memory by retinoic acid, but does not teach or suggest any action of retinoic acid on the consolidation process of short-term to long-term memory. Moreover, Etchamendy does not teach or suggest Am80 and/or administering of Am80 let alone any non-natural retinoid, but discloses retinoic acid. Retinoic acid has the structural formula:



whereas Am80 has the structural formula of:



Therefore, while one having ordinary skill in the art would not have combined the disclosures of Etchamendy and Teng, even if the disclosures were combined, any proper combination would not have arrived at a method for promoting formation of long-term memory from short-term memory, comprising administering to a mammal, in need of consolidation of short-term as long-term memory, a therapeutically effective amount of a composition to promote memory consolidation of short-term memory as long-term memory, the composition comprising Am80 as an active ingredient.

Still further, Goodman does not overcome the deficiencies of either Teng or Etchamendy or any combination thereof. The rejection relies upon the abstract of Goodman for its disclosure that late onset Alzheimer's disease is influenced by the availability in brain of retinoic acid, and

the rejection contends that it is known in the art that memory fixation disorders are main symptoms of Alzheimer's disease. However, Goodman only discloses in the abstract that:

> These findings suggest testable experiments to determine whether increasing the availability of retinoid in brain, possibly through pharmacologic targeting of the RA receptors and the cytochrome P450 RA-inactivating enzymes, can prevent or decrease amyloid plaque formation.

Thus, Goodman does not appear to disclose a method for promoting formation of long-term memory from short-term memory, comprising administering to a mammal, in need of consolidation of short-term as long-term memory. Moreover, Goodman discloses retinoic acid but does not disclose Am80. In fact, Goodman discloses at page 2904, at the paragraph beginning at the end of the left-hand column, potential therapies for future testing that pertain to use of drugs that increase RA synthesis. **Accordingly, Goodman does not teach or suggest using any non-natural retinoid let alone Am80.**

Still further, Goodman appears to relate to preventing or decreasing amyloid plaque formation, and does provide disclosure as relied upon in the rejection. The rejection has not established where Goodman teaches or suggests any disclosure relating to consolidating memory let alone consolidating short-term as long-term memory.

Appellant further notes that the only reference to any documentation relating to Am80 in the Final Office Action is Hashimoto et al. (at the bottom of page 6 of the Final Office Action). However, Hashimoto is not used in the rejection of record, and reference thereto is improper with respect to the rejection of record. The rejection appears to be arguing inherency. However, inherency cannot be present here as inherency of Appellant's recited method must be the necessary result when performing the process recited in the prior art and not merely a possible result. **In contrast, the primary reference of Teng does not disclose either Appellant's recited method and/or any desirability of treating a population in need of consolidation of**

short-term as long-term memory, and does not teach or suggest administration of Am80. Moreover, any combination of the Teng, Etchamendy and Goodman does not arrive at Appellant's method because any combination thereof, while improper for the reasons set forth above, would not treat a population in need of consolidation of short-term as long-term memory and would not use Am80.

In the Advisory Action, the examiner contends that:

> The limitation "formation of long-term memory from short-term memory" in claim 7 is the preamble and administration of same compound to the same set of patients, for example patients with Alzheimer's disease will have the same therapeutic effects as claimed and here promoting formation of long-term memory from short term memory.

In contrast to the assertions in the Advisory Action, Appellant notes that the subject matter of "formation of long-term memory from short-term memory" not only present in the preamble of Appellant's independent claim 7, but also in the body thereof. Moreover, the preamble of a claim can give life and meaning to the preamble's statement of purpose. For example, the Manual of Patent Examining Procedure (MPEP) 2111.02 Effect of Preamble, indicates that the determination of whether a preamble limits a claim is made on a case-by-case basis in light of the facts in each case. Amongst the cases cited therein of examples wherein the preamble limits a claims is the following:

> ....In considering the effect of the preamble in a claim directed to a method of treating or preventing pernicious anemia in humans by administering a certain vitamin preparation to "a human in need thereof," the court held that the claims' recitation of a patient or a human "in need" gives life and meaning to the preamble's statement of purpose.).*Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951)....

In the instant situation, Appellant's independent claim 7 is specifically directed to a method for promoting formation of long-term memory from short-term memory, and explicitly

recites administering to a mammal, in need of consolidation of short-term as long-term memory, a therapeutically effective amount of a composition to promote memory consolidation of short-term memory as long-term memory, the composition comprising Am80 as an active ingredient. Thus, the claim is directed to the population of mammals in need of consolidation of short-term as long-term memory, which is not taught of suggested by any combination of the documents used in the examiner's rejection. Moreover, the method includes the administration of Am80 which is not taught or suggested by any of the documents used in the examiner's rejection.

The Advisory Action also presents arguments that, "Teng teaches retinoid compounds that includes the species Am-80"; however, the rejection improperly does not establish that Am80 is disclosed in Teng, and improperly does not establish, for the reasons set forth above, that one having ordinary skill in the art would arrive at Am80 let alone use of Am80 in Appellant's recited process. Certainly, a rejection is not sustainable when the combination of art set forth in the rejection does not arrive at each and every feature recited in Appellant's claims.

In the Advisory Action, the examiner contends that:

> A person of ordinary skill in the art from the teachings of Teng, Goodman and Etchamendy would have found it obvious to try the retinoids of Teng in treating a memory related disorder such as Alzheimer's because the reference explicitly teaches the retinoids are useful in treating neurodegenerative diseases such as Alzheimer's and Parkinson's. A person of ordinary skill in the art at the time of the invention would have found it obvious to use Am-80 in promoting long term memory from short term memory as Am-80 is one of the species of the retinoids taught by Teng.

In contrast to the assertions by the examiner and for the reasons set forth above, Teng does not teach or suggest Am80 as one of the species of retinoids. Additionally, as set forth above, Teng is directed to treatment of tumors without having one or more undesirable side effects of retinoids. Mere reference in a long laundry list in the Background Art section of Teng does not provide any direction for one having ordinary skill in the art to arrive at Appellant's

recited method let alone perform any experimentation relating thereto with respect to the asserted "obvious to try" assertion in the Advisory Action.

The Advisory Action also appears to equate retinoic acid and Am80 by contending that, "Administration of the same retinoic acid (e.g. Am80) to the same set of patients (e.g. Alzheimer's disease) will result in the treatment of same disorders including consolidating short-term memory to long-term memory." However, the rejection makes no showing as to expectation of any expected results of Am80 as compared to retinoic acid, and does not provide any showing of consolidating short-term memory to long-term memory in any documents used in the rejection let alone with Am80. The rejection has not shown that one having ordinary skill in the art would be led to consolidating short-term memory to long-term memory from any disclosure in any of Teng, Etchamendy and/or Goodman. The rejection does not provide any teaching or suggestion of treating a population in need of consolidation of short-term as long-term memory, and does not teach or suggest administration of Am80. Moreover, any combination of the Teng Etchamendy and Goodman does not arrive at Appellant's recited method because any combination thereof, while improper for the reasons set forth above, would not treat a population in need of consolidation of short-term as long-term memory, and would not use Am80.

Still further, Appellant's dependent claim 2 further defines independent claim 7 by reciting wherein the promoting formation of long-term memory from short-term memory comprises therapeutic treatment of dysfunction of memory consolidation associated with a neurodegenerative disease. Dependent claim 8 further defines independent claim 7 and dependent claim 2 by reciting wherein the dysfunction of memory consolidation associated with a neurodegenerative disease comprises Alzheimer disease. Dependent claim 9 further defines

independent claim 7 and dependent claim 2 by reciting wherein the dysfunction of memory consolidation associated with a neurodegenerative disease comprises Parkinson's disease. Dependent claims 16, 18 and 19 dependent upon claims 2, 7 and 8, respectively, further recite that the mammal is a human.

Appellant submits that the obviousness rejection of Appellant's claims 2, 7-9, 16, 18 and 19 uses improper hindsight based upon Appellant's disclosure in an attempt to arrive at Appellant's claimed subject matter. However, one having ordinary skill in the art would not have arrived at Appellant's claimed subject matter at least for the reasons set forth above.

Accordingly, at least for the reasons set forth above, the rejection of claims 2, 7-9, 16, 18 and 19 is without appropriate basis and should be reversed.

CONCLUSION

For the reasons set forth above, it is respectfully submitted that the Examiner has failed to establish that a *prima facie* case of obviousness is present, which is a prerequisite for maintaining a rejection under 35 U.S.C. 103(a). The Board is, therefore, respectfully requested to reverse the Final Rejection, and to allow the application to issue in its present form.

Respectfully submitted,
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Attachments: (VIII) Claims Appendix
(IX) Evidence Appendix
(X) Related Proceedings Appendix

(VIII) CLAIMS APPENDIX

CLAIMS ON APPEAL

2. The method according to claim 7, wherein the promoting formation of long-term memory from short-term memory comprises therapeutic treatment of dysfunction of memory consolidation associated with a neurodegenerative disease.

7. A method for promoting formation of long-term memory from short-term memory, comprising administering to a mammal, in need of consolidation of short-term as long-term memory, a therapeutically effective amount of a composition to promote memory consolidation of short-term memory as long-term memory, the composition comprising 4-[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)carbamoyl]benzoic acid as an active ingredient.

8. The method according to claim 2, wherein the dysfunction of memory consolidation associated with a neurodegenerative disease comprises Alzheimer disease.

9. The method according to claim 2, wherein the dysfunction of memory consolidation associated with a neurodegenerative disease comprises Parkinson's disease.

16. The method according to claim 2, wherein the mammal is a human.

18. The method according to claim 7, wherein the mammal is a human.

19. The method according to claim 8, wherein the mammal is a human.

(IX) Evidence Appendix

Copies of evidence entered by the Examiner and relied upon by Appellant in the appeal along with statements setting from where in the record that evidence was entered in the record by the Examiner.

U.S. Patent No. 5,965,606 to Teng et al. - entered in the record in the initialed Information Disclosure Statement form attached to the Office Action dated May 13, 2010.

Goodman et al. (Goodman) "Evidence for defective retinoid transport and function in late onset Alzheimer's disease" *Proc. Natl. Acad. Sci. USA* **100**(5):2901-2905, 2003 - entered in the record in the initialed Information Disclosure Statement form attached to the Office Action dated May 13, 2010.

Etchamendy et al. (Etchamendy), "Alleviation of a Selective Age-Related Relational Memory Deficit in Mice by Pharmacologically Induced Normalization of Brain Retinoid Signaling" *J. Neurosci.* **21**(16):6423-6429, 2001 - entered in the record in the initialed Information Disclosure Statement form attached to the Office Action dated May 13, 2010

(X) Related Proceedings Appendix

None